**Supplementary Table S1**. Dose estimates and mortality during the chronic stop-exposure study.

Duration of DCA treatment   control dH <sub>2</sub> O treatment (weeks)	0   93	4   89	10   83	26   67	52   41	93   0
Mean water consumption (ml/kg/d) <sup>1</sup>	129	111	122	110	105	100
Mean DCA dose (mg/kg/d) <sup>2</sup>		429	479	423	397	377
Animals started on study	105	29	99	89	69	49
Animals at scheduled necropsy	90	24	91	79	52	33
Interim	65	0	66	55	35	16
Final	25	24	25	24	17	17
Unscheduled deaths	15	5	8	10	17	16
Early mortality						
0-26 wks	2	0	1	0	0	0
27-52 wks	7	0	1	1	0	0
53-79 wks	1	0	1	3	8	1
80-104 wks	4	4	2	4	7	15
Missing animals	1	1	3	2	2	0
Unscheduled deaths with pathology <sup>3</sup>	2	5	4	5	12	11
Scheduled deaths without pathology <sup>4</sup>	0	1	0	0	0	0
Total animals with pathology	92	28	95	84	64	44

<sup>&</sup>lt;sup>1</sup> Water intake was measured by cage every 4-5 weeks from weeks 4-89.

<sup>&</sup>lt;sup>2</sup> The target dose of DCA during treatment was 429 mg/kg/d. DCA water concentrations were measured 44 times throughout the study. Mean concentrations through study week 4, 15, 26, 52, and 104 were 3.86 g/L, 3.92 g/l, 3.84 g/l, 3.78 g/l, and 3.77 g/l, respectively. Dose values refer only to the DCA treatment period for each group.

<sup>&</sup>lt;sup>3</sup> Tissues from early deaths were evaluated by histopathology when available. Tissues with autolysis were excluded. In early death cases only liver tumors were diagnosed, resulting in differences in the number of cases examined for neoplastic compared to non-neoplastic liver findings.

<sup>&</sup>lt;sup>4</sup> One animal in the 4-week DCA exposure group did not appear in the pathology report.